



REPORT
OF THE
AGRICULTURAL EDUCATION
COMMITTEE OF THE CENTRAL
ADVISORY BOARD OF EDUCATION
1944

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PREFACE.

The Board considered the report of the Agricultural Education Committee and adopted the same with certain amendments. The Board directed that the report as approved should be communicated to the authorities concerned for necessary action.



सत्यमेव जयते

Report of the Agricultural Education Committee of the Central Advisory Board of Education, 1944 as amended and adopted by the Board at their annual meeting in January 1945.

At their tenth meeting held at Baroda in January 1944, the Central Advisory Board of Education considered the report of the Committee appointed by them to explore the mode of developing the facilities for technical education (including art and commercial education) in the country as a whole. In view of the great importance for this country of Agricultural Education, the Committee had left it out of their deliberations and had recommended the appointment of a special Committee to consider the problem in all its aspects. The Board therefore appointed the following Committee to examine and report on the problem of Agricultural Education :—

W. H. F. Armstrong, Esq., C.I.E., M.A., I.E.S., D.P.I., Punjab.

The Hon'ble Pir Illahi Bakhsh Nawazali, Minister for Education Sind.
Rao Bahadur Sir V. T. Krishnamachari, K.C.I.E.

Gaganvihari L. Mehta, Esq., M.A. (Ex-President, Federation of Indian Chambers of Commerce).

S. N. Moos, Esq., C.I.E., M.A., I.E.S., D.P.I., Bombay.

John Sargent, Esq., C.I.E., M.A., Educational Adviser to the Government of India.

Sardar Bahadur Sardar Ujjal Singh, M.A., M.L.A. (Punjab).

The Chairman was authorised, to nominate a suitable number of agricultural experts to serve on the Committee.

2. In accordance with the power conferred by the Board, the Chairman of the Board invited the following additional members to serve :—

1. L. K. Elmhirst, Esq., Special Adviser, Agricultural Department, Government of Bengal.

2. Dr. Sam Higginbottom, Principal, Agricultural College, Naini.

3. Sir Pheroze Kharegat, C.I.E., I.C.S., Additional Secretary to the Government of India, Department of Education, Health and Lands.

4. Dr. F. C. Minett, D.Sc., M.R.C.V.S., Director, Imperial Veterinary Research Institute, Mukteswar-Kumaon.

5. Sri Rao Bahadur G. N. Rangaswami Ayyangar, Madras.

3. The Chairman of the Board appointed Rao Bahadur Sir V. T. Krishnamachari as Chairman of the Committee.

4. The Committee met at New Delhi on the 11th and 12th December 1944. The following members were present :—

1. Rao Bahadur Sir V. T. Krishnamachari (Chairman)

2. W. H. F. Armstrong, Esq.

3. Dr. Sam Higginbottom.

4. Sir Pheroze Kharegat.

5. Dr. F. C. Minett.

6. Sri Rao Bahadur G. N. Rangaswami Ayyangar.

7. John Sargent, Esq.

Dr. D. M. Sen, M.A., Ph.D. (London), Secretary, Central Advisory Board of Education, was Secretary of the Committee.

The following members were unable to be present :—

1. L. K. Elmhirst, Esq.
2. The Hon'ble Pir Illahi Bakhsh Nawazali.
3. Gaganvihari L. Mehta, Esq.
4. S. N. Moos, Esq.
5. Sardar Bahadur Sardar Ujjal Singh.

5. The agenda which the Committee considered is set out in the annexure.

The following additional papers were circulated to the members :—

- (1) A note on the existing facilities for Agricultural Education in India.
- (2) Note by Dr. Sam Higginbottom, Principal, Allahabad Agricultural Institute.

(3) Report of the Committee on Post-War Agricultural Education in England and Wales.

6. The following papers were laid on the table :—

(1) A statement showing the facilities available in India for Agricultural Education (including Education in Animal Husbandry and Dairying).

(2) A statement showing the qualifications required of teachers in Agricultural (including Veterinary and Dairy) institutions in India and their scales of pay.

7. The Technical Education Committee (1943), whose Report has been endorsed by the Board and as a result of whose recommendation this Committee came to be appointed, observed that Agricultural Education, which includes Education in Animal Husbandry and Dairying, "should be regarded as an essential branch of Technical Education and should be closely linked up with the other branches." The Committee see no logical reason to differ from that view, but they are of opinion that in view of the special circumstances of India it will be necessary at any rate for some time to come to maintain the existing system and deal with Agricultural Education separately.

8. It is perhaps unnecessary to define here the nature, scope and function of Agricultural Education since they are essentially the same as those of Technical Education generally. It is therefore suggested that reference should be made to the Report of the Technical Education Committee in which the subject has been adequately discussed. All that need be done here is to point out that Agricultural Education should not be regarded as a single, uniform type of instruction. It must necessarily vary according to the needs of the different types of persons who will desire it. Broadly speaking, some will require instruction in an agricultural science and others training in scientific agriculture. A proper system of Agricultural Education should therefore aim at providing (a) general education, combined with practical training in agriculture suited to the needs of future farmers, and (b) special education for persons who will advise farmers as administrators or organisers, and (c) more advanced scientific and practical instruction of different standards for those persons whose object it is to be teachers or research workers.

9. The existing facilities in this country for Agricultural Education can at best be described as meagre. There are at present in British India, in addition to (a) the Imperial Agricultural Research Institute, the only institution of its kind, (b) seven Agricultural Colleges, (c) two Arts and Science Colleges which have a Department of Agriculture and (d) 19 Agricultural Schools. On the Animal Husbandry side there are, besides (a) the Imperial Veterinary Research Institute, Mukteswar, the only post-graduate institution, (b) five Veterinary Colleges. For education in Dairying there is only the Imperial Dairy Institute, Bangalore, though the Allahabad Agricultural Institute also provides

training for the Indian Dairy Diploma. While no stage of Agricultural Education is adequately provided for, one is particularly struck by the niggardly provision for research and by perhaps an even greater neglect of the needs of practical farmers, including cattle farmers and dairymen.

Nor can the existing provision be considered satisfactory in regard to the quality of instruction. With a few notable exceptions, the instruction given in the existing institutions tends to be somewhat too theoretical or, at best, too idealistic and unrelated to the actual conditions of the country. It would perhaps not be an unfair comment to say that a graduate in Agriculture who is placed on a farm is likely to find that he must unlearn a great deal before he can utilise properly the useful knowledge of certain fundamental principles which he has acquired. If, therefore, the Agricultural branch of education is to play its proper role in the impending development of the country, it must be improved very considerably and at once.

10. Apart from the needs of private farmers and teachers in agricultural institutions, increased and improved facilities are required to meet the requirements of the development programmes of the Agriculture Departments of the Central and Provincial Governments. It is estimated that during the next 10-15 years the personnel required by Government Departments for the development of Agriculture and Animal Husbandry will be as follows :—

Agriculture :

- 20,000 Field Assistants (Kamdars).
- 10,000 Non-graduate Assistants.
- 1,500 Graduate Assistants.
- 300 Gazetted Officers (Class I and Class II).

Animal Husbandry :

- 20,000 Stockmen.
- 4,000 Inspectors. (Graduates, of the rank of Veterinary Assistant Surgeons).
- 550 Gazetted Officers (Class I and Class II).

To enable one to consider the full implications of the above programme, so far as institutions of Agricultural Education are concerned, the nature and length of the training required, for the different grades of personnel may also be stated here.

Agriculture :

Field Assistants.—One year's course at a Farm Institute which will be located on a Model Farm.

Non-graduate Assistants.—2 years' course at a special Agricultural School or the normal course at an Agricultural High School.

Graduate Assistants.—4 years' course at an Agricultural College or University.

Gazetted Officers.—A suitable post-graduate course of at least 2-3 years' duration.

Animal Husbandry :

Stockmen and Compounders.—One year's course partly at a Departmental laboratory and partly at a Farm Institute, which is equipped for training in Animal Husbandry.

Inspectors (or Veterinary Assistant Surgeons).—4 years' course at a Veterinary College.

Gazetted officers.—A suitable post-graduate course.

It is obvious that in order to meet these demands it is necessary to bring into existence as early as possible a comprehensive and planned system of Agricultural Education.

11. "Education from the earliest stages", observed the Technical Education Committee, "should aim at making boys and girls familiar with practical as well as academic subjects." From the point of view of agriculture, it may be added that adequate provision should be made in Junior Basic (Primary) Schools for Nature Study and practical gardening of an elementary character. A small garden is in any case a very desirable adjunct to a Junior Basic School. Apart from this, however, it is unnecessary to include Agricultural Education as such in the curriculum of any Junior Basic School.

12. (i) It can be assumed that a very large number of Senior Basic (Middle) Schools will adopt Agriculture as the basic craft which will integrate the entire curriculum. It will be in these schools that a boy or girl will obtain the first introduction to the regular study of Agriculture; and it will be these schools which will produce the bulk of farm hands and the lowest grade personnel of the Government Departments of Agriculture. In view of the practical character of the instruction to be given in these schools it is perhaps unnecessary to mention that they should also encourage their pupils to keep a few animal pets. The schools themselves will no doubt keep some for instructional purposes.

(ii) It is contemplated that there will be two main types of High Schools, (a) academic High Schools, and (b) those of a more practical type, called Technical High Schools. A variation of the latter will be the Agricultural High Schools, which will give the same standard of education as academic High Schools, except that its instruction will be more practical and will have a strong agricultural bias. It is to be expected that Agricultural High Schools will be mostly in rural areas, but there is no reason why such a school should not be located in a small country town or just outside what may technically be an urban area. Indeed, if the town and country are not to form two separate worlds, it is to be hoped that a large number of urban students will go into Agricultural High Schools and that Technical High Schools will contain a fair number of students from rural areas.

(iii) The lowest type of a professional institution for Agricultural Education will be the Farm Institute, which will be located on a Model Farm. It will in fact be rather the instructional side of a Model Farm. The Farm Institute will provide training for Kamdars and Stockmen.

(iv) It is contemplated that the existing type of a special Agricultural School will continue for the present but that it will be possible to do away with it when Agricultural High Schools have developed sufficiently.

(v) Students of Agricultural High Schools, and some perhaps of other High Schools also, will pass on to Agricultural Colleges or Agriculture Departments of Universities if they desire to proceed to higher studies and are fit to do so. These institutions will prepare students for the degree course which will be of at least of 3 years' duration in the case of candidates proceeding from an Agricultural High School and four years' duration in the case of those who join after completing their course in an academic High School. These institutions will also prepare students for post-graduate courses of varying duration.

(vi) The top branch of the educational tree will be central institutes of advanced research, such as the Imperial Agricultural Research Institute and the Imperial Veterinary Research Institute. These institutes will provide facilities for the highest type of instruction and research and will be the principal recruiting ground for the highest class of experts and research workers.

In addition to the regular full-time courses which will be provided in the institutions detailed above, adequate facilities should also be provided for those who are already engaged in agriculture in one capacity or another and desire to improve their knowledge, and also for High School leavers and such others as may intend to take up farming and wish to have a short course of practical.

training. It is, therefore, expected that Agricultural Colleges as well as special Agricultural Schools and Farm Institutes will also arrange short-term extension or refresher courses in particular branches of Agriculture and Animal Husbandry, including Veterinary Science, Dairying, Poultry Farming, Estate Management, etc. The nature, content and duration of the different types will be determined from time to time according to actual needs and in the light of experience.

13. It has been stated above that post-school Agricultural Education, except the most advanced types of research, will be provided in Agricultural Colleges or Agriculture Departments (or Faculties) of Universities. The latter have no doubt several advantages arising from the close association of their students and teachers with those engaged in other studies. It should, however, be emphasised that, notwithstanding such advantages, if these Departments (or Faculties) of Universities are to serve as real alternatives to Agricultural Colleges, it is necessary that they should be adequately equipped and staffed.

14. The value of educational tours generally needs no emphasis. It is perhaps even greater for a practical subject like Agriculture. Indeed where students of Agriculture have once experienced the benefits of an educational tour they have almost always asked for more, even at considerable expense and inconvenience to themselves. It is therefore hoped that educational tours will be a regular and important activity of Agricultural Colleges and similar institutions.

15. Another extra-curricular activity, the need for which in agricultural institutions appears to be considerable is the art of public speaking. This is particularly important for those who desire to serve as advisers to farmers. It is not an infrequent experience to find a field worker otherwise knowledgeable and efficient, who is quite unable to express himself clearly and make farmers understand what he is trying to tell them.

16. All school examinations will be conducted by appropriate educational authorities, and there will be no difference in this respect between schools with an agricultural character and other schools. In the post-school stage, however, the question of the examining authority arises, because in addition to Agricultural Departments, attached to Arts and Science Colleges and Agricultural Departments (or Faculties) of Universities, there will also be independent Agricultural Colleges. The Committee, are, however, of the opinion that, in order to maintain uniform standards and to secure a wide, recognition for the students of Agricultural Colleges, all examinations for the Bachelor's and higher degrees should be conducted by Universities. Diplomas and certificates for short courses as well as for courses of advanced research will, however, be awarded by the institutions concerned.

Where degrees or diplomas are awarded on the basis of an examination, it is suggested that there should be two external examinations in a four-year course—one at the end of the first two years and the other at the end of the course. In the case of a three year course, however, there should be only one external examination at the end of the course. If it is considered necessary or desirable to hold one or more tests at earlier stages they should be conducted internally and should cause as little disturbance as possible to the progress of the course.

17. With the growth of a large and comprehensive system of Agricultural Education it will be still more necessary to ensure that the institutions concerned maintain proper standards of instruction and training. It is therefore suggested that the Imperial Council of Agricultural Research should set up a Council of Agricultural Education (including, as understood throughout this report, education in Animal Husbandry and Dairying). The functions

of this Council will be mainly advisory, but it will be one of its most important duties to keep itself acquainted with the standards of instruction prevailing in the higher agricultural institutions. It should also be able to make its voice heard and thus ensure proper standards if it is given the power to endorse diplomas and certificates issued by higher institutions of agricultural education and also to make recommendations to the appropriate authorities in regard to the standards of agricultural instruction and examinations in Universities.

With regard to the composition of the Council it is obviously desirable that it should consist of persons who are regarded as experts in their own subject and whose word will therefore carry weight. It is also necessary that the Education Department should be represented on the Council so that proper co-ordination may be secured in the administrative field between the lower and higher stages of instruction.

18. The Committee considered the question of the qualifications and scales of salaries of teachers of Agricultural subjects, and they arrived at the following conclusions :—

(1) Teachers of Agriculture in Senior Basic (Middle) Schools should possess qualifications similar to those required for the teachers of other subjects, except that they should have undergone a course of practical training in Agriculture.

(2) Teachers of Agriculture in Special Agricultural Schools and Agricultural High Schools must be at least graduates in Agriculture and should afterwards have received a year's practical training, partly in Agriculture and partly in pedagogy.

(3) University or College teachers must possess at least a Master's degree in the subject which they are to teach. It is desirable that they should also receive some pedagogical training.

With regard to salary, the Committee considered that teachers of agricultural subjects should receive scales of salary similar to those of teachers of other technical subjects.

19. The Committee also considered the question of arrangements which should be made to enable suitable students in poor circumstances to take full advantage of facilities for Agricultural Education. This question has already been considered by the Board in relation to education generally and also specifically in connection with Technical Education. It has been agreed that adequate provision should be made for a system of scholarship and maintenance allowances and also for hostel facilities. On the other hand, it is also generally agreed that the present level of tuition fees in the higher stages of education is very low for those who can afford to pay and considering the high cost of such education. The Committee assume that the same standards of fees and the same facilities for fee concessions, maintenance allowances and hostel accommodation will obtain in respect of Agricultural Education as in regard to the other branches of education.

20. In regard to the question as to which Department of Government should be in control of Agricultural Education, the Committee observed that the Board had accepted the recommendation of the Technical Education Committee that Technical Education being but a branch of education, should be administered, as it is administered in nearly every other country, by the same Department which is responsible for the other branches of education. The Committee recognise that there are strong arguments in favour of Education Departments being administratively responsible for Agricultural Education in the same way as for other branches of education. At the same time they feel that it would be impracticable to attempt to bring about such a change in the existing circumstances. The Committee therefore recommend that all Agricultural institutions, except Senior Basic Schools, Agricultural High

Schools, Agriculture Departments of Arts and Science Colleges and Agriculture Departments (or Faculties) of Universities should continue to be in the administrative charge of Agriculture Departments.

21. One advantage of the Agricultural Department being in control of Agricultural Education is that it can better serve to bring together the research worker and the farmer. It is suggested that an effective method to do this would be for the Agricultural Department to try to secure the co-operation of landlords and agricultural workers in various ways. Agricultural exhibitions, fairs and similar meetings should be encouraged, and every endeavour should be made to promote associations of agriculturists, including organisations of young farmers. The latter would be particularly important from the educational as well as from the purely agricultural point of view, and similar organisations have been found very useful in other countries. The 'young farmers' should be enrolled while still at school and should be permitted to continue their membership for a few years after they leave school. It is perhaps not too much to hope that if such youth organisations are set up properly they may appreciably raise the tone of the schools concerned and also do valuable propaganda work for education as well as agriculture in the countryside, without being conscious of their role as propagandists.

22. The following is a summary of the main conclusions and recommendations of the Committee :—

(1) Agricultural Education including education in Animal Husbandry and Dairying is logically a branch of Technical Education but in view of the special circumstances of India it will be necessary at any rate for some time to come to deal with it separately. Since, however, its scope and function are related so closely to those of Technical Education generally reference may usefully be made to the general conclusions contained in the Report of the Technical Education Committee of the Board.

(2) The aim of a proper system of Agricultural Education should be to provide (a) general education combined with practical training suited to the needs of future farmers, (b) more advanced scientific and practical instruction for those who will be called upon to advise farmers as administrators or organisers and also for teachers and research workers.

(3) The existing facilities for Agricultural Education are wholly inadequate to meet the probable requirements of the country in the near future, and it is necessary to bring into existence as early as possible a comprehensive and planned system of Agricultural Education.

(4) It is unnecessary to include Agricultural Education as such in the curriculum of any Junior Basic (Primary) School. All that is required at that stage is to make provision for Nature Study and practical elementary gardening.

(5) Beyond the Junior Basic stage agricultural instruction and training should be arranged in the following types of institutions :—

(i) Senior Basic (Middle) Schools, where Agriculture is adopted as the basic craft.

(ii) Agricultural High Schools. Schools, which combine General Education with a strong agricultural bias. These need not necessarily be located in rural areas only.

(iii) Farm Institutes (on Model Farms) where training will be provided for Kamdars and Stockmen.

(iv) Agricultural Schools imparting special education in Agriculture. Agricultural Colleges and Agriculture Departments (or Faculties) of Universities, which will prepare students for the Bachelor's degree in Agriculture covering a period of at least three years in the case of students

passing out of Agricultural High Schools and four years in the case of those passing out of academic High Schools, Colleges and faculties of Universities will also prepare students for post-graduate degrees of varying duration.

(v) Central institutes of advanced research.

In addition to regular full-time courses, (iii), (iv) and (v) will also provide short term extension or refresher courses in particular branches of Agriculture and Animal Husbandry, including Veterinary Science, Dairying, Poultry Farming, Estate Management, etc.

(6) Agriculture Departments (or Faculties) of Universities, as distinguished from independent Agricultural Colleges, have several advantages arising from the close association of the students and teachers with those engaged in other studies.

(7) Provision should be made for the training of the personnel of the Agricultural and Veterinary Departments as follows :—

Agriculture Departments.

(a) *Field Assistants*.—One year's course at a Farm Institute.

(b) *Non-graduate Assistants*.—2 years' course at an Agricultural School or the normal course at Agricultural High Schools.

(c) *Graduate Assistants*.—4 years' course at an Agricultural College or University.

(d) *Gazetted Officers*.—Post graduate courses of varying standards.

Veterinary Department.

(a) *Stockmen*.—One year's course.

(b) *Compounders (or Pharmacists)*.—One year's course.

(c) *Veterinary Assistant Surgeons*.—3 to 5 years' course at a Veterinary College.

(d) *Gazetted Officers*.—Post-graduate courses of varying standards.

(8) All examinations in the school stage will be conducted by the appropriate educational authorities. Examinations for the Bachelors' and higher degrees should be conducted by Universities. Diplomas and certificates for short courses of advanced research will, however, be awarded by the institutions concerned. There should be two external examinations in a four-year course—one at the end of the first two years and the other at the end of the course. In the case of a three-year-course, however, there should be only one external examination at the end of the course. All other tests should be conducted internally.

(9) In order to ensure that proper standards of instruction and training are maintained, the Imperial Council of Agricultural Research should set up a Council of Agricultural (including Animal Husbandry and Dairying) Education, with power to endorse diplomas and certificates awarded by agricultural institutions and also to make recommendations to the appropriate authorities in regard to the standards of agricultural examinations in Universities. The Education Department should be represented on the Council.

(10) Similar qualifications are required for teachers of Agriculture in Senior Basic (Middle) Schools or Agricultural High Schools as for teachers of other subjects, except that they must have undergone a course of practical training in Agriculture. University or College teachers must possess at least a **Masters'** degree in the subject which they are to teach, and it is **desirable that they should also receive pedagogical training.**

(11) **Teachers of agricultural subjects should receive salaries similar to those of teachers of technical subjects.**

(12) The same standards of fees and the same facilities for fee concessions, scholarships, maintenance allowances and hostel accommodation should obtain in respect of Agricultural Education as in regard to other branches of education.

(13) While there are strong arguments in favour of Education Departments being administratively responsible for Agricultural Education, as for other branches of education, it is not practicable in the existing circumstances to effect this change at present, and all agricultural institutions except Senior Basic Schools, Agricultural High Schools, Agriculture Departments of Arts and Science Colleges and Agricultural Departments (or Faculties) of Universities should continue to be in the administrative charge of Agriculture Departments.

(14) Every endeavour should be made to promote associations of agriculturists including organisations of young farmers who should be enrolled while they are still at school. Agricultural exhibitions, fairs and similar meetings should also be encouraged.

ANNEXURE I.

AGENDA.

1. To consider the scope and function of Agricultural Education, including education in Animal Husbandry and Dairying, with special reference to the likely future needs of India.

2. To consider what types of institutions are required for a comprehensive system of Agricultural Education and to define their special function and place in relation to the other branches of the educational system.

3. To consider the proper relationship of the higher branches of agricultural instruction, including research, to Universities and institutions of University rank.

4. To consider how far the provision for Agricultural Education should consist of full-time or part-time courses designed for those already engaged in Agriculture.

5. To consider the nature, content and duration of the main types of courses to be provided, including part-time courses.

6. To consider the question of Examinations at the different stages of Agricultural Education.

7. To consider the question of the recruitment, training and conditions of service of teachers for institutions of different types imparting Agricultural instruction.

8. To consider what arrangements should be made for enabling suitable students in poor circumstances to take full advantage of facilities for Agricultural Education.

9. To explore the best means of organising and administering Agricultural Education in order to meet the needs of the country as a whole.

10. To consider what Department of Government should be generally in control of Agricultural Education.

11. To consider what steps should be taken to secure the active co-operation of other Departments concerned with technical problems of Agriculture as well as with landlords and agricultural workers.

ANNEXURE II.

VIEWS OF MR. L. K. ELMHURST, SPECIAL ADVISER, AGRICULTURE DEPARTMENT, GOVERNMENT OF BENGAL.

Fundamental, of course, to the whole position in India; is the need for elementary education of the right kind and there will be no major progress in agriculture until every cultivator can read and write and understand the

elements of **the problems he is trying** to cope with. In advanced agricultural countries **more and more of this wider** knowledge is being given at the elementary stage of education as part of the biological, chemical, physics and botanical training. All the new rural senior schools (age range 11 to 15) in Devonshire have space for the teaching of biology, chemistry, physics and carpentry as well as of domestic economics and science for the girls. In New York State, after period (say 1910-1925) during which very many of the leading farmers took degrees at the state agricultural college degree courses came to be reserved almost wholly for technical specialists, research men and the advisory staff and the future farmer obtains his advanced training through the rural high school which has a highly qualified teacher and especially equipped laboratories for this work, well described in Higginbottom's note. After he leaves the High School, the four H. Clubs organisation carries the latest scientific and economic advice to him on his father's farm and thereby save considerable sums, at one time spent by the state in trying to get ideas into the heads of ill-educated adult farmers and their wives, they would be farmer. He can still attend special and short courses at his State University and takes every advantage of this privilege.

I have little doubt that all other countries have to go through the same stages but the U.S.S.R. did succeed in speeding up the whole process of education by taking boys and girls into national service organisations for their period of conscription and in using this training as a broad and technical education instead of attempting an extension of High School and University facilities which would have taken a number of years.

Such a course would be entirely logical in India and would be the least expensive method of speeding up general progress. What I am getting at is that it is no use proliferating advanced education and research at the top, unless there is a proliferation of intelligence and an improvement of "reception" at the bottom.

My last suggestion is that the Provincial Departments of Education should enrich elementary education with practical science and workshop teaching and be responsible for an education with a strong rural basis, not bias, up to the end of both elementary and secondary education in rural area and that during this period, the closest collaboration should be established between the Departments of Education and Agriculture over curricula and equipment. In Devon, the Country Agricultural Advisory Staff (called in the U. S. A. Extension) offer a wide range of specialist teachers who visit the rural senior schools giving courses in special skills. The Universities with similar collaboration should be responsible for the University and technical college training of rural specialists. Institutes for Advanced Research and Training should always be set up in the neighbourhood of Universities but should not necessarily be run by them but preferably be under a body like the I.C.A.R. upon which the Department of Agriculture and the University authority and the public would be represented.

Behind all your questions lies a still bigger one and, that is, the economic policy, welfare aim and social objective of the State. No private landlord or tenant farmer can any longer afford from his private pocket to instal into rural areas that wide range of utilities and services, educational, scientific, economic and welfare which rural areas need. These can from now on be provided by the State alone or in financial collaboration with the farmer and/or landlord. The State too must stand as an economic unit within the international economy of the future. Farm prices in India and the need of the world and India for her rural output must bear an economic relationship to India's own rural requirements if she is ever going to have the educational structure she requires.